

ABSTRACT

A grinding method for single-disc cylindrical grinding of elongated objects, such as cylindrical paper machine rollers, in which method the object to be grounded is rotated about its axis and a grinding stone is rotated and its position on the surface of the object being ground is adjusted so that the grinding point of the grinding stone is held substantially at a constant distance from the center axis of the object being ground regardless of the deflection of the object. In the method, the position of the grinding stone is adjusted using an oscillating positioning controller synchronized with the rotation of the roller and receiving feedback from a measured quantity that bears a linear correlation to the change of position of the surface being ground.